

Preliminary Amendment and  
Response to Restriction Requirement  
Application No. 09/654,182

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16. <sup>4</sup> (Amended) The chromatography column of claim 1, wherein the organic group is a phenyl or naphthyl group having ionic or ionizable groups.

17. <sup>7</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises an amino acid or derivatized amino acid, cyclodextrin, immobilized protein, polypeptides, or combinations thereof.

18. <sup>10</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises a  $-C_6F_5$  group, a trifluoromethyl-phenyl group, a bis-trifluorophenyl group, or combinations thereof.

al 19. <sup>13</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises  $-Ar-(C_nH_{2n+1})_x$  group, wherein n is an integer of from about 1 to about 30 and x is an integer of from about 1 to about 3.

20. <sup>16</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises cyclodextrin attached through an alkyl group.

21. <sup>19</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises polyethylene glycol or methoxy-terminated polyethylene glycol or derivatized resins thereof.

22. <sup>22</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises  $-Ar-((C_nH_{2n})COOX)_m$ , wherein Ar is an aromatic group, n is 0 to 20, m is 1 to 3, and X is H, a cation, or an organic group.

23. <sup>25</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises  $Ar-((C_nH_{2n})OH)_m$ , wherein Ar is an aromatic group, n is 0 to 20, m is 1 to 3.

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~~24.~~ <sup>28</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises  $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{NH}_2)_m$ , wherein  $n$  is 0 to 20,  $m$  is 1 to 3, or its protonated form:  $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{NH}_3\text{X})_m$ , wherein  $\text{X}$  is an ion, and  $\text{Ar}$  is an aromatic group.

~~25.~~ <sup>31</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises  $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{CHNH}_3^+\text{COO}^-)_m$  and the reaction products thereof with molecules containing functional groups terminated in  $-\text{NH}_2$ ,  $-\text{OH}$ , or  $-\text{COOH}$ , wherein  $\text{Ar}$  is an aromatic group and  $n$  is 0 to 20.

91 ~~26.~~ <sup>34</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises  $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{CH}=\text{CH}_2)_m$ , wherein  $n$  is 0 to 20,  $m$  is 1 to 3 or  $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{SO}_2\text{CH}=\text{CH}_2)_m$ , where  $n$  is 0 to 20 and  $m$  is 1 to 3.

~~27.~~ <sup>37</sup> (Amended) The chromatography column of claim 1, wherein the organic group comprises at least one chiral ligand group.

~~28.~~ <sup>5</sup> (Amended) The chromatography column of claim ~~16~~ <sup>4</sup>, further comprising a second organic group attached on the carbonaceous material.

~~29.~~ <sup>8</sup> (Amended) The chromatography column of claim ~~17~~ <sup>7</sup>, further comprising a second organic group attached on the carbonaceous material.

~~30.~~ <sup>11</sup> (Amended) The chromatography column of claim ~~18~~ <sup>10</sup>, further comprising a second organic group attached on the carbonaceous material.

~~31.~~ <sup>14</sup> (Amended) The chromatography column of claim ~~19~~ <sup>13</sup>, further comprising a second organic group attached on the carbonaceous material.

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32. <sup>17</sup> (Amended) The chromatography column of claim ~~20~~<sup>16</sup>, further comprising a second organic group attached on the carbonaceous material.

33. <sup>20</sup> (Amended) The chromatography column of claim ~~21~~<sup>19</sup>, further comprising a second organic group attached on the carbonaceous material.

34. <sup>23</sup> (Amended) The chromatography column of claim ~~22~~<sup>22</sup>, further comprising a second organic group attached on the carbonaceous material.

9.1 35. <sup>26</sup> (Amended) The chromatography column of claim ~~23~~<sup>25</sup>, further comprising a second organic group attached on the carbonaceous material.

36. <sup>29</sup> (Amended) The chromatography column of claim ~~24~~<sup>28</sup>, further comprising a second organic group attached on the carbonaceous material.

37. <sup>32</sup> (Amended) The chromatography column of claim ~~25~~<sup>31</sup>, further comprising a second organic group attached on the carbonaceous material.

38. <sup>35</sup> (Amended) The chromatography column of claim ~~26~~<sup>34</sup>, further comprising a second organic group attached on the carbonaceous material.

39. <sup>6</sup> (Amended) The chromatography column of claim ~~28~~<sup>5</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

40. <sup>9</sup> (Amended) The chromatography column of claim ~~29~~<sup>8</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

41. <sup>12</sup> (Amended) The chromatography column of claim ~~30~~<sup>11</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

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~~42.~~<sup>15</sup> (Amended) The chromatography column of claim ~~31~~<sup>14</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~43.~~<sup>18</sup> (Amended) The chromatography column of claim ~~32~~<sup>17</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~44.~~<sup>21</sup> (Amended) The chromatography column of claim ~~33~~<sup>20</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

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~~45.~~<sup>24</sup> (Amended) The chromatography column of claim ~~34~~<sup>23</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~46.~~<sup>27</sup> (Amended) The chromatography column of claim ~~35~~<sup>26</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~47.~~<sup>30</sup> (Amended) The chromatography column of claim ~~36~~<sup>29</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~48.~~<sup>33</sup> (Amended) The chromatography column of claim ~~37~~<sup>32</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~49.~~<sup>36</sup> (Amended) The chromatography column of claim ~~38~~<sup>35</sup>, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

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